Heavy Weather 1.1 Installation Guide

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Heavy Weather Pro 1.1 Installation Guide[1]

Licensing Summary

The HeavyWeather Pro 1.1 software necessary to transfer Weather Station Professional data to your PC is licensed to you at no charge with qualifying purchase of any of the following 35/3600 Series hardware models: WS-3510, WS-3512, and WS-3610. You may install it on one PC, and if desired, the same owner may install one additional copy on one notebook. Reasonable backups of the software may be made for disaster recovery purposes. If you transfer the hardware to a new owner, you must uninstall and transfer the software CD with the unit, safely destroying, to the reasonable extent possible, related backup media.

This statement is a summarized version of the license. If you have further questions, please contact La Crosse Technology Customer Support at 1-888-211-1923.

System Requirements

La Crosse Technology software is supported only on Windows computer systems. **Full support** is provided without charge during the one year weather station hardware warranty period on PC operating systems for which Microsoft, the publisher of Windows, maintains active service and support. Therefore, as of 08/2011, our supported versions are as follows:

Type of Support	***Windows Version***
Full Support	Windows 7/SP1 Any 32-bit editions
	Vista/SP2 Any 32-bit editions
	Windows XP Professional SP3 32-bit
	Windows XP Media Center SP3
	Windows XP Home SP3
	Windows XP Tablet 2005 SP3

Limited support is provided on Windows operating systems for which Microsoft has discontinued active support or for which features limit our ability to meet your needs. [2] Limited support means that we will answer product functionality questions, but cannot resolve operating system-related issues on a version we did not design the product for use on.

[1] HeavyWeather 1.1 software and WS-3510, WS-3512 and WS-3610 all registered to La Crosse Technology, Inc. All rights reserved.

[2] Weather stations are not designed for server, network, mulit-user or virtualized use. Any use is a Limited Support situation.

Type of Support	*Windows Version*
Limited Support	Windows 2008 Server R2 (32-bit)
	Windows 2003 Server R2 or SP2 (32-bit)
	Network, multi-user or virtualization
	64-bit versions of Windows 7/Vista
Not Supported	Windows 2000 Server SP4
	Windows 2000 Professional SP4
	Windows 98 (prior to 2nd Edition)
	Windows 98 SE
	Windows ME
	Windows NT SP6a (any type)

For additional details on Microsoft's Operating System Lifecycle Policy, please refer to http://www.microsoft.com/windows/lifecycle/default.mspx. Specific discontinuation dates for Windows support are available from the Windows Lifecycle FAQ links.

Setup Weather Station Hardware

Using the Touch Screen Weather Center Operation Manual* for your Weather Station, or the Quick Setup Guide included in your package, start the weather station unit and related sensors. We recommend the weather station components be operational *without* PC connection for at least 2-3 days to ensure the Weather Station hardware functions properly and you understand its features before you begin your initial PC upload.

If you do not have product documentation, additional copies are available at www.lacrossetechnology.com.

*A copy of the Operation Manual (hardware) document is also available on your CD, see section below.

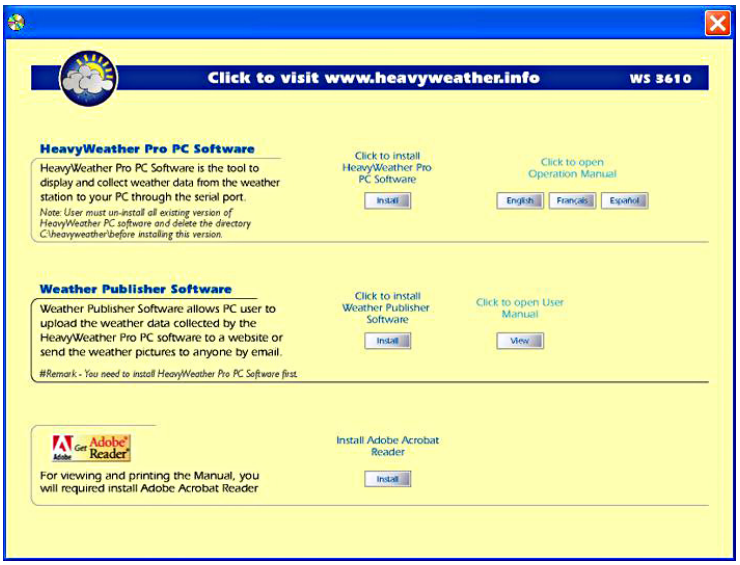
Review Heavy Weather 1.1 Documentation

- Make sure the title on the accompanying CD contains a reference beginning with WS-3500 or WS-3600. The HeavyWeather 1.1 software operates **all** series 35/3600 series workstations. Specifically these models are WS-3510, WS-3512, and WS-3610.

- Please verify the model number WS-#### on the back of your Weather Station to ensure it is 35/3600 series hardware (usually on the battery

compartment cover). **It is imperative you use the correct series software.**

- Insert the accompanying WS #### CD in your DVD or CD drive. The HeavyWeather installation screen should auto-start. The version to the **right** of the logo should be a **3500 or 3600 series** version. The exact screen may vary a bit by weather station model:


Click to visit www.heavyweather.info
WS 3610
HeavyWeather Pro PC Software
HeavyWeather Pro PC Software is the tool to display and collect weather data from the weather station to your PC through the serial port.
Note: User must un-install all existing version of HeavyWeather PC software and delete the directory C:\heavyweather\before installing this version.
Click to install HeavyWeather Pro PC Software
Install
Click to open Operation Manual
English
Français
Español
Weather Publisher Software
Weather Publisher Software allows PC user to upload the weather data collected by the HeavyWeather Pro PC software to a website or send the weather pictures to anyone by email.
#Remark - You need to install HeavyWeather Pro PC Software first.
Click to install Weather Publisher Software
Install
Click to open User Manual
View
Get Adobe Reader
For viewing and printing the Manual, you will required install Adobe Acrobat Reader
Install Adobe Acrobat Reader
Install

- Notice in particular the button(s) available in the right column. You may click on any **<Language>** button or **View** button to open electronic copies of the manuals.

- At minimum, please review the **Operation Manual** (hardware) and this **Installation Guide** *before* proceeding with software installation.

- If you do not have a CD, or it does not match your weather station model, then please download a **new** version of the HeavyWeather 1.1 software from www.lacrossetechnology.com. If you cannot download, contact La Crosse Technology Customer Support at 1-888-211-1923 for information on replacement CDs.

- Alternatively, you can download a current version of the HeavyWeatherPro V1.1 software from http://www.heavyweather.info.[3]

[3] Reminder: 3610 software runs the WS-3510 or WS-3512 models.

Plan for PC Communication Mode

All weather station 35/3600 Series models supported by the HeavyWeather 1.1 software come with an RS-232 (9-pin) serial port communication cable[4]. Use of this cable is *required* to upload data from the weather station to your computer.

Please check your PC (usually in back) to verify that it has a serial port installed. If the computer has a serial port, it will look like a rounded rectangle with 9 pins protruding inside the frame:

Many newer PCs no longer have a serial port. If you cannot locate a serial port, depending on your system, there are relatively simple upgrades you may be able to install to support serial communication (see next page or Appendix D: Frequently Asked Questions, item #7).

Caution: If you are not proficient with computer hardware, please consult a qualified technician[5] before investing in a solution. Please remember to verify carefully the operating system supported by each new hardware component you intend to purchase to ensure it matches your system.

We cannot provide you with complete instructions on how to buy and install the necessary hardware upgrades, nor can we provide support on these components. We can only provide a general concept summary as to what hardware upgrade options are most commonly used and might be available.

Desktop Users

Communication Type	Hardware Needed	How it Installs	Consider before Investment	HeavyWeather Installation Guide Used
RS-232 Serial	Serial port card (9-pin)	Open slot inside PC	May need help to install.	RS-232 Cable (Serial Port). This book, p. 8.

[4] The RS-232 communication for La Crosse Technology weather stations uses a proprietary communication protocol. Design data will not be released.
[5] e.g. professional computer technicians may carry an A+ Certification.

Notebook Users

Communication Type	Hardware Needed	How it Installs	Consider before Investment	HeavyWeather Installation Guide Used
RS-232 Serial	PCMCIA Serial Port (9-pin)	Open PCMCIA slot on notebook body	Not all notebooks support PCMCIA.	RS-232 Cable (Serial Port). This book, p. 8.

Operating System User Rights

On most Windows systems, you need to have **administrative** permissions to install software. If you do not have this permission on the target computer, please contact your system administrator or computer technician *before* proceeding further.

RS-232 Cable (Serial Port) Installation

Preparing the PC for Serial Communication (RS-232)

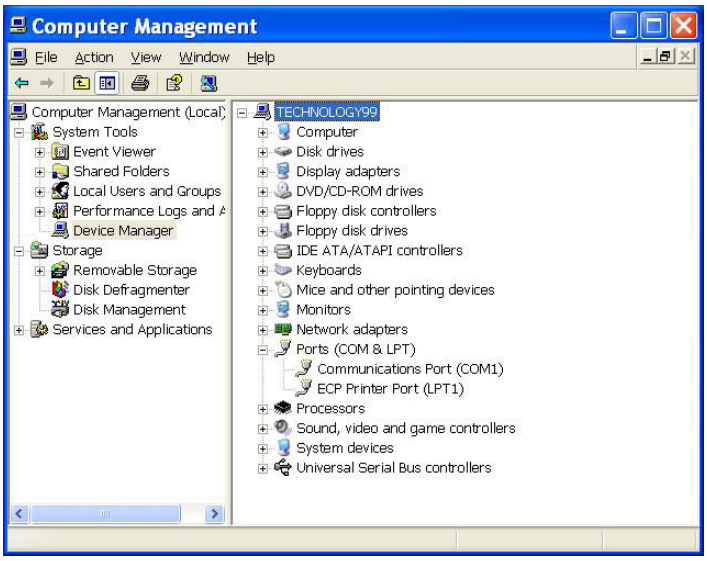
All examples are provided using Windows XP Professional SP2. See Appendix C if you use a different version of Windows.

- Right click on the **My Computer** icon (usually on your desktop) and select the **Manage** menu option.[6]

- Select the **Device Manager** item in the left window, so that the list of device types appears.

[6] Alternatively, you can enter Device Manager via Start|Settings|Control Panel|Administrative Tools|Computer Management.

- Click on the plus sign on the **Ports** item to expand content. This will show you which communication ports (COM ports) are available for use on your computer.



- COM ports are usually assigned to COM 1-4 by your operating system, with COM1 being the most commonly available physical port. (Note: If you use an internal modem or other serial device, the system will also assign it a COM port, in which case *two* COM parts may show in Device Manager, even if you only found *one* physical port on the PC).

Note: <u>Your weather station must use COM ports 1-8</u>. Windows XP, Windows 2000 or Vista may assign a COM port higher than 1-8. If so, see Appendix A for changing a COM port assignment.

- Use the chart below to record your computer's COM port assignments. **Make note of the COM port you wish to use for your Weather Station.**

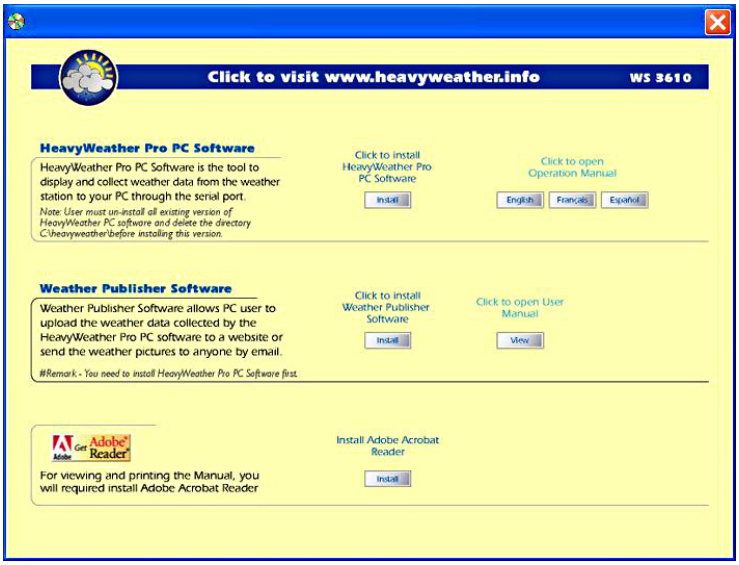
COM Port	Item Using Com Port

Note: Users on Windows 98SE/ME should see Appendix B for IRQ verification instructions.

- **<u>Connect the serial cable to your PC serial port (using the 9-pin connection)</u>.**

HeavyWeather 1.1 Software Installation

Note: If the CD was removed previously, re-insert it to re-start the installation screen.


Click to visit www.heavyweather.info
WS 3610
HeavyWeather Pro PC Software
HeavyWeather Pro PC Software is the tool to display and collect weather data from the weather station to your PC through the serial port.
Note: User must un-install all existing version of HeavyWeather PC software and delete the directory C:\heavyweather\before installing this version.
Click to install HeavyWeather Pro PC Software
Install
Click to open Operation Manual
English
Français
Español
Weather Publisher Software
Weather Publisher Software allows PC user to upload the weather data collected by the HeavyWeather Pro PC software to a website or send the weather pictures to anyone by email.
#Remark - You need to install HeavyWeather Pro PC Software first.
Click to install Weather Publisher Software
Install
Click to open User Manual
View
Get Adobe Reader
For viewing and printing the Manual, you will required install Adobe Acrobat Reader
Install Adobe Acrobat Reader
Install

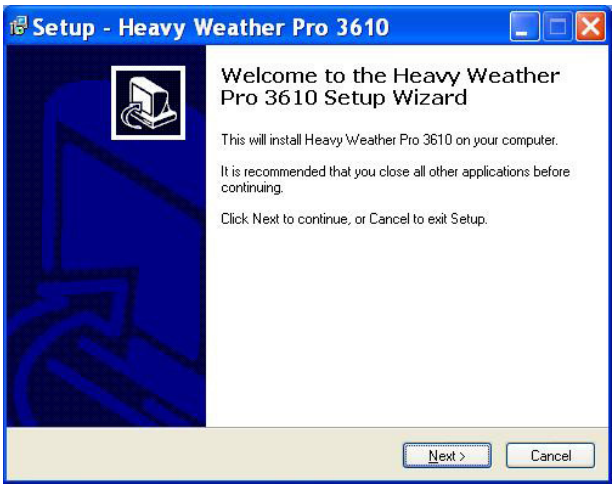
- <u>If the CD does not auto-start</u>:
    - select **My Computer**, find the CD drive, then right click on the drive and select **Explore** on the menu. Try a double click on “autorun”.
    - If that fails, open the **HW** folder and then open the correct language folder. Double-click on the either **Setup.exe** or **Install.exe** found on the root of the CD (depending on your weather station model).

Begin Installation

If you haven’t already done so, verify that the WS #### version to the right of the logo reflects a 35/3600 series software product. (You should already have verified that the WS-#### on the back of your weather station <u>is</u> a 3500 or 3600 series model).

- ***If prompted,*** *select the desired language (German, English or French) and click the* ***OK*** *button.*
- Then select the **Install** button in the HeavyWeather Pro PC Software section of the screen.

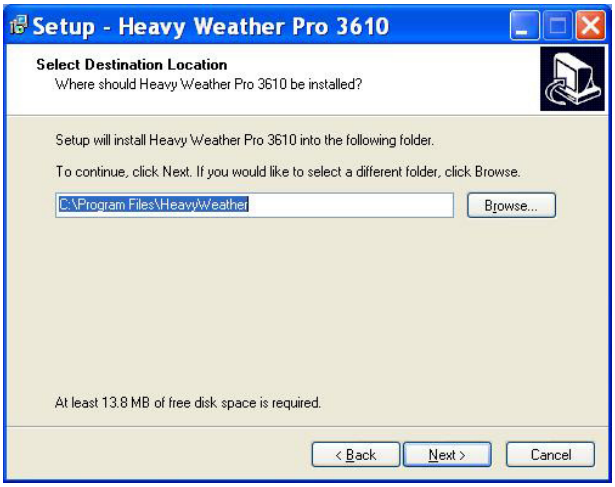
- After a brief delay, you should see the HeavyWeather installation “Welcome” window. Select **Next.**


Setup - Heavy Weather Pro 3610
Welcome to the Heavy Weather Pro 3610 Setup Wizard
This will install Heavy Weather Pro 3610 on your computer.
It is recommended that you close all other applications before continuing.
Click Next to continue, or Cancel to exit Setup.
Next >
Cancel

Note: The 3610 model designation will show on the Welcome screen regardless if you are installing for a WS-3510 or WS-3512.

- Select **Next.**

.


Setup - Heavy Weather Pro 3610
Select Destination Location
Where should Heavy Weather Pro 3610 be installed?
Setup will install Heavy Weather Pro 3610 into the following folder.
To continue, click Next. If you would like to select a different folder, click Browse.
C:\Program Files\HeavyWeather
Browse...
At least 13.8 MB of free disk space is required.
< Back
Next >
Cancel

Note: We do ***not*** recommend that you change any HeavyWeather path entries as there are certain tasks dependent on the default locations. The size of the installation is small, and it will not consume much space on drive C.

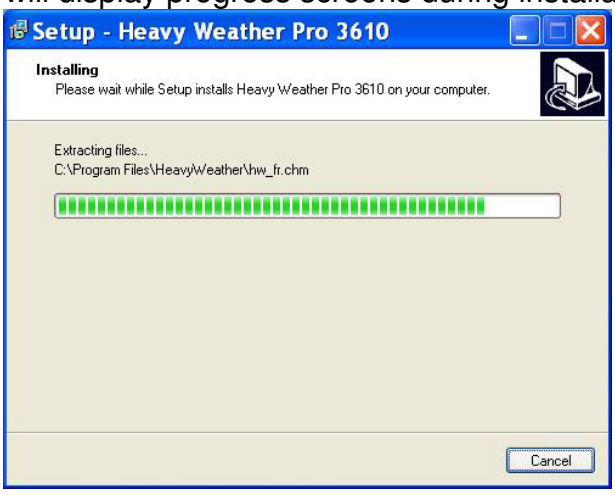
- Accept the defaults on the program shortcuts screen and select **Next.**

Setup - Heavy Weather Pro 3610
Select Start Menu Folder
Where should Setup place the program's shortcuts?
Setup will create the program's shortcuts in the following Start Menu folder.
To continue, click Next. If you would like to select a different folder, click Browse.
HeavyWeather
Browse...
< Back
Next >
Cancel

- Proof-read your selections (as below) and select **Install.**

Setup - Heavy Weather Pro 3610
Ready to Install
Setup is now ready to begin installing Heavy Weather Pro 3610 on your computer.
Click Install to continue with the installation, or click Back if you want to review or change any settings.
Destination location:
C:\Program Files\HeavyWeather
Start Menu folder:
HeavyWeather
< Back
Install
Cancel

- The software will display progress screens during installation.


Setup - Heavy Weather Pro 3610
Installing
Please wait while Setup installs Heavy Weather Pro 3610 on your computer.
Extracting files...
C:\Program Files\HeavyWeather\hw_fr.chm
Cancel

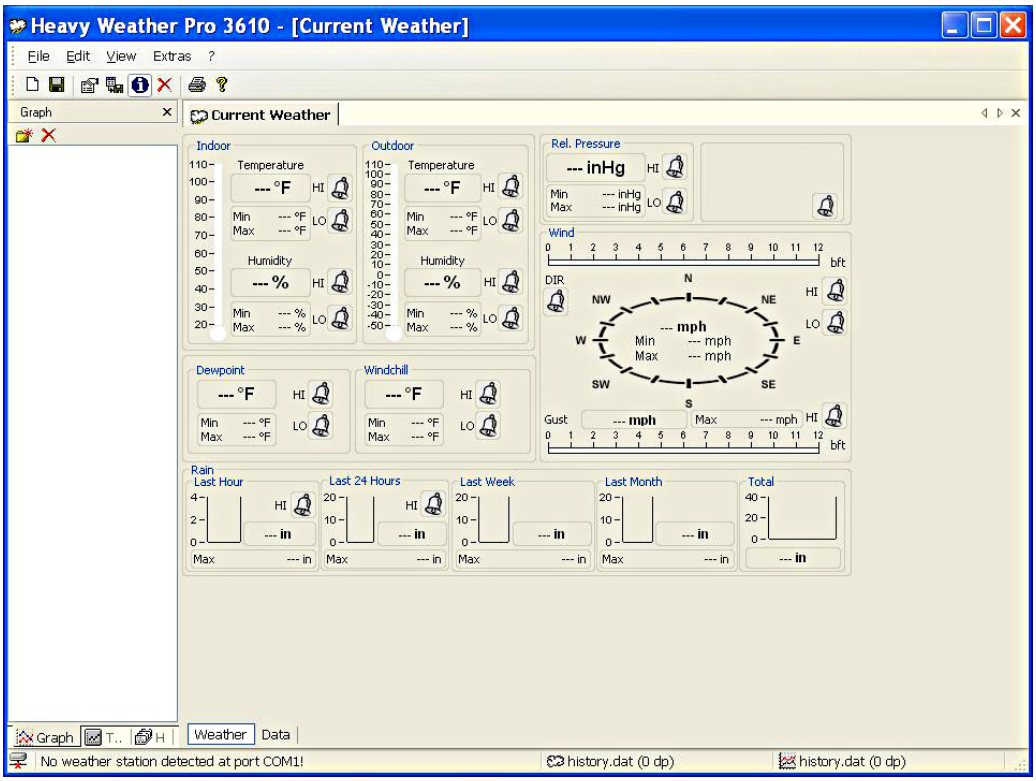
- When the message for completing installation comes up, select **Finish.**

Setup - Heavy Weather Pro 3610
Completing the Heavy Weather Pro 3610 Setup Wizard
Setup has finished installing Heavy Weather Pro 3610 on your computer. The application may be launched by selecting the installed icons.
Click Finish to exit Setup.
Finish

- Next click on the Red **X** (upper right corner of window) to close the Heavy Weather software installation CD. You may remove the CD from the drive and store it in the protective CD case.

- A desktop icon should now be available for use of the product. Select the **icon** with a double-click.

- You will see the main screen of the software (without weather data).

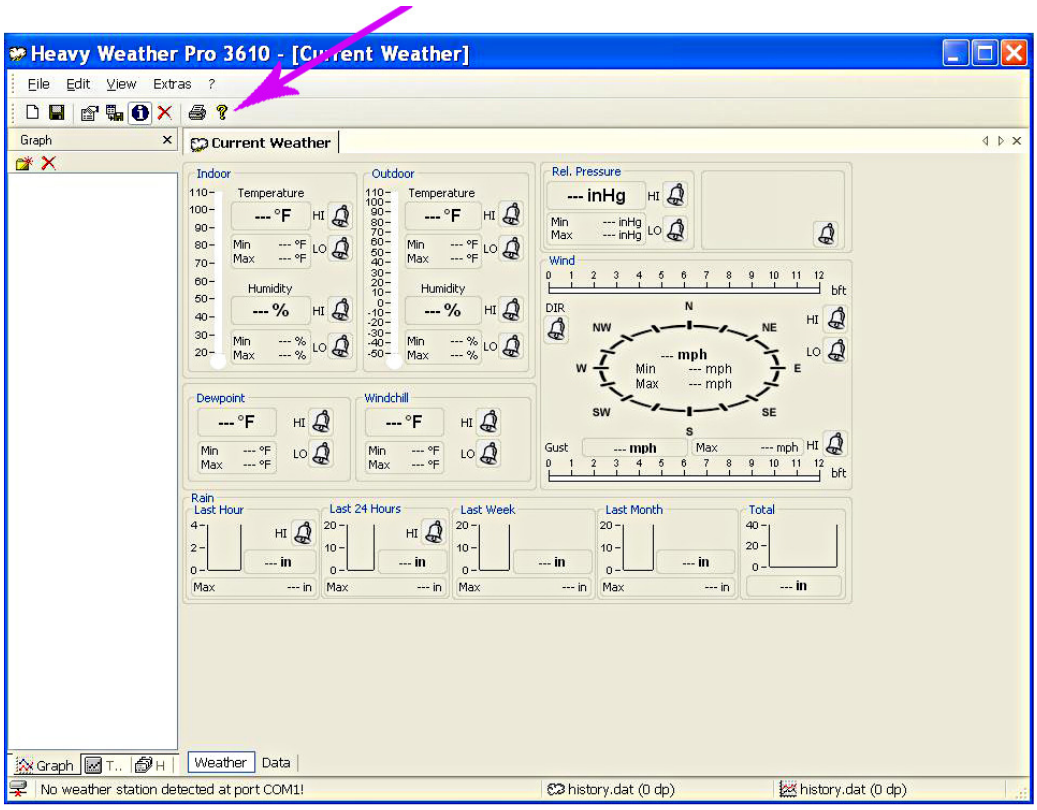


- If your PC assigned your serial port to COM1, then you will notice Wind and/or temperature data fill in quickly on WS-3610 models.

Note: WS-3510 users do not receive wind or rain data. WS-3512 users do not receive temperature, humidity or rain data. These users can verify the **Rel Pressure** area for data.

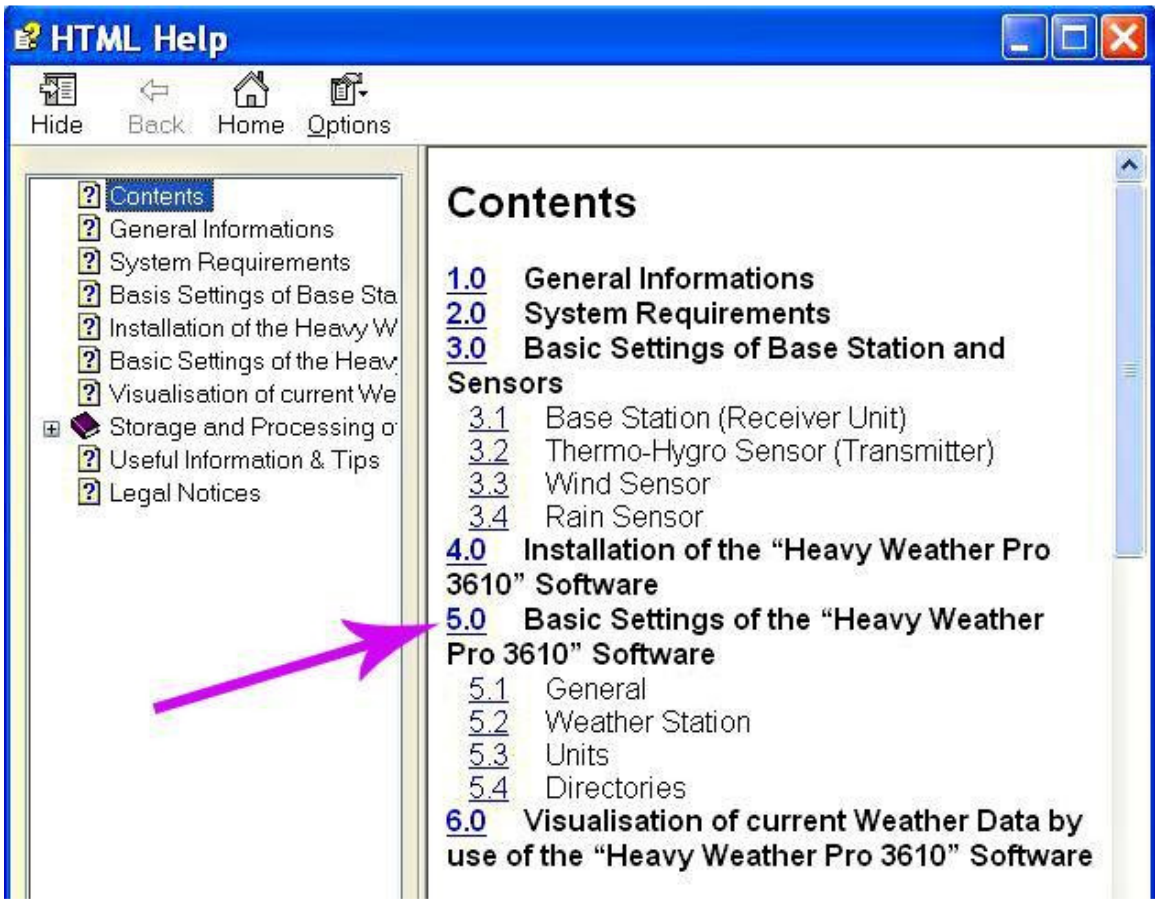
Even if you display data quickly, you should continue on and verify the basic software configurations.

- Find the icons in the toolbar at the top of the HeavyWeather screen. Place your mouse at the **yellow ? mark**, and double-click to open the Help File.



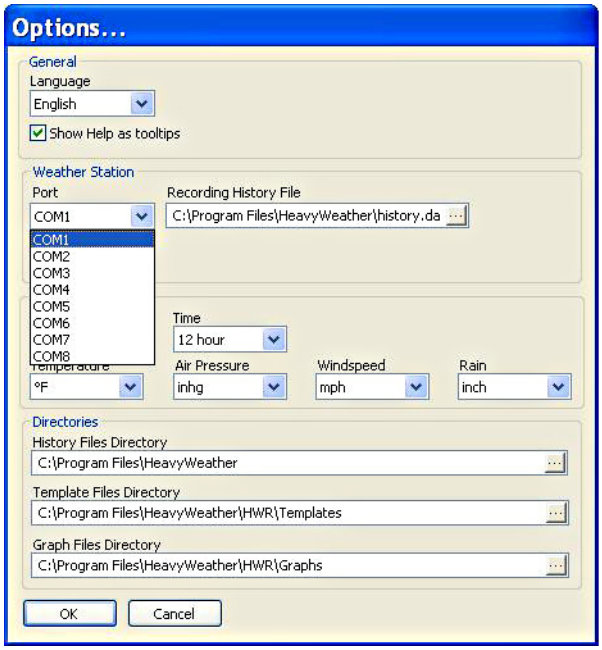
(*Continued*)

- Notice the “Contents” entry on the left side of the Help screen**.** Find section 5.0 on the right side for the “Basic Settings of the Heavy Weather Pro 3610 Software”. Follow the directions in each portion of Section 5 to configure your software.

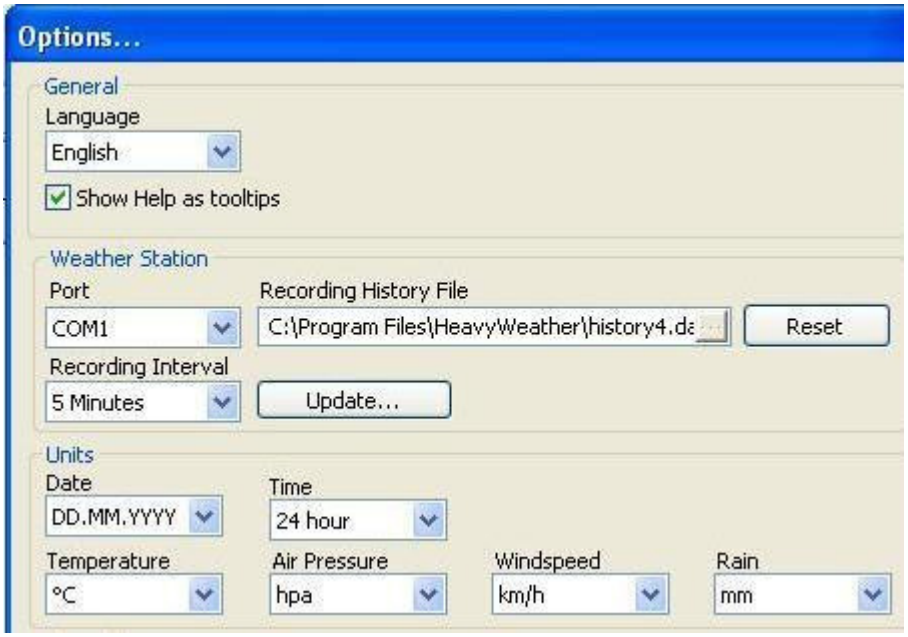


(*Continued*)

- **Pay particular attention to section 5.2!** The COM port configured in the Options window must match the one you verified in Device Manager for the weather station's use. (Hint: This information is likely recorded in the chart provided on page 9.)



Note: The other options can be set as desired later using the Help file on screen. In particular you will want to set the Recording Interval[7] (for which the base stores and reports data) and the Units section.

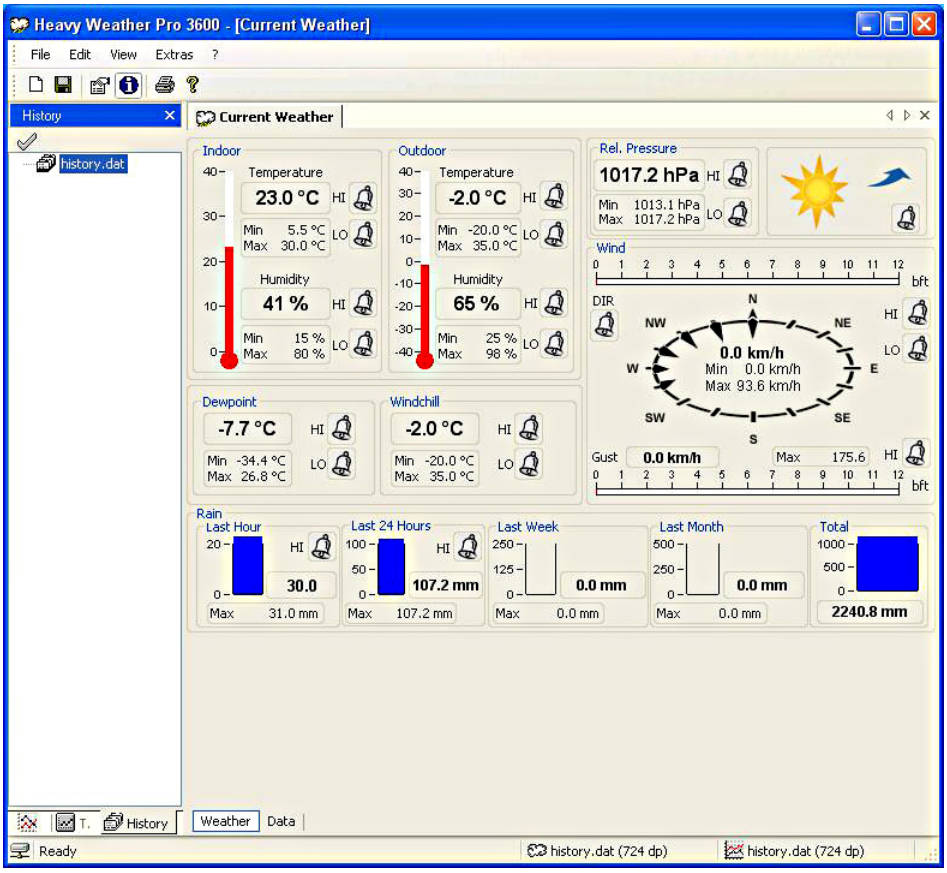


[7] Recording Interval is not displayed unless the base station is connected to your PC.

- Again, once your COM port is correct, you should begin to see data display in the application Window. The exact weather details displayed will vary according to the features supported in the model you purchased and the types of sensors you have activated.

➢ At minimum, all series 35/3600 users should have an entry in the **Rel Pressure** area (for barometric pressure data).

➢ Users of WS-3510 and WS-3610 should also display **Indoor Temperature** data if the PC serial connection is communicating.



Note: Please allow up to 72 hours for your weather station to collect sufficient outdoor data to display all data types supported in the software (exact features vary by model).

Additional Configurations

The full software user *Manual is contained in the HTML Help file*. Examples of content covered:

- You have the option to view weather information as graphics or data, set alarms, etc.
- In **Extras**|**Options**, you will want to review the **Units** of measure tab to ensure they reflect data in the measurement language you prefer.
- You can organize and graph your data with the HeavyWeather Review module.

Additional Software Modules

HeavyWeather Review

HeavyWeather Review helps you graph the data uploaded to the PC from the weather station.

This software was automatically installed as you installed HeavyWeather for series 35/3600 weather stations. Details on how to use HeavyWeather **Review** module start in the "Storage & Data Processing" section of the HTML help file (see pp 23-25 for instructions to access the on-line help file as help functions similarly in Review and Publisher).

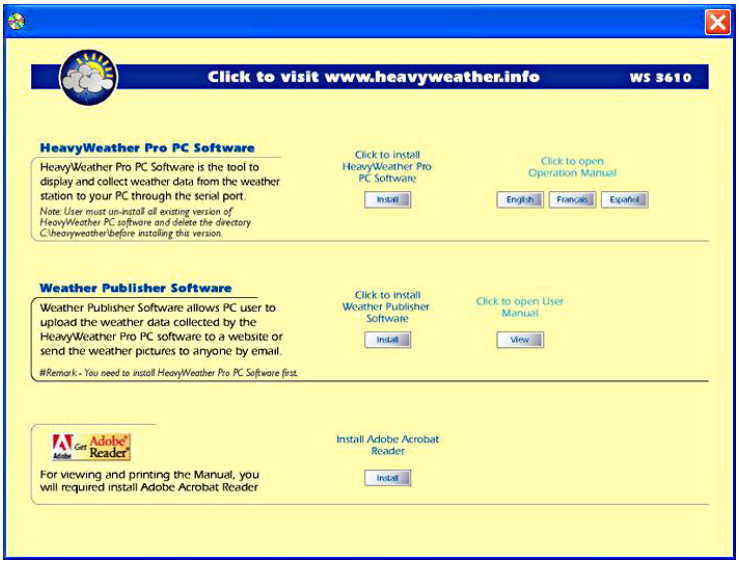
Note: Please keep your template and graph files stored in the folders where HeavyWeather Review saved them, as the software is location-dependent. You can and should, of course, make backup copies of this material in a different location.

HeavyWeather Publisher

Users of WS-3510 and WS-3610 can install HeavyWeather Publisher (optional). This software allows you to upload your weather data to a personal or public site (via ftp), or e-mail it to one or more pre-defined address(es).

To install Publisher, re-insert the installation CD. It will re-start the main software installation menu.

Note; The main installation screen for models WS-3610 and WS-3510 look slightly different, but the instructions for both are the same.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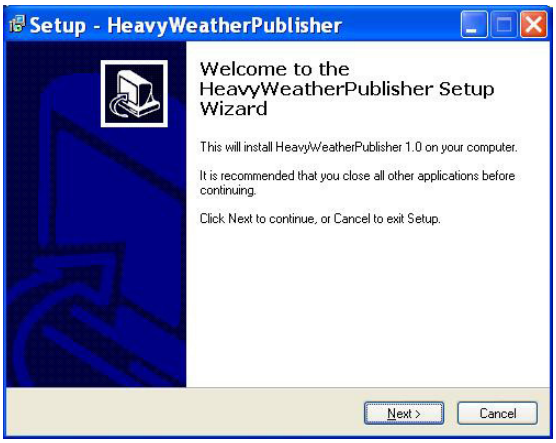
WS 3610
HeavyWeather Pro PC Software
HeavyWeather Pro PC Software is the tool to display and collect weather data from the weather station to your PC through the serial port.
Note: User must un-install all existing version of HeavyWeather PC software and delete the directory C:\heavyweather\before installing this version.
Click to install HeavyWeather Pro PC Software
Install
Click to open Operation Manual
English
Français
Español
Weather Publisher Software
Weather Publisher Software allows PC user to upload the weather data collected by the HeavyWeather Pro PC software to a website or send the weather pictures to anyone by email.
#Remark - You need to install HeavyWeather Pro PC Software first.
Click to install Weather Publisher Software
Install
Click to open User Manual
View
Get Adobe Reader
For viewing and printing the Manual, you will required install Adobe Acrobat Reader
Install Adobe Acrobat Reader
Install

- Locate the **Weather Publisher Software** heading in the middle of the screen.
- Select the **Install** button.
- After a brief delay, you should see the HeavyWeather Publisher "Welcome" window Select **Next.**


Setup - HeavyWeatherPublisher
Welcome to the HeavyWeatherPublisher Setup Wizard
This will install HeavyWeatherPublisher 1.0 on your computer.
It is recommended that you close all other applications before continuing.
Click Next to continue, or Cancel to exit Setup.
Next >
Cancel

Note: We do ***not*** recommend that you change any HeavyWeather Publisher path entries as there are certain tasks dependent on the default locations. The size of the installation is small, and it will not consume much space on drive C.

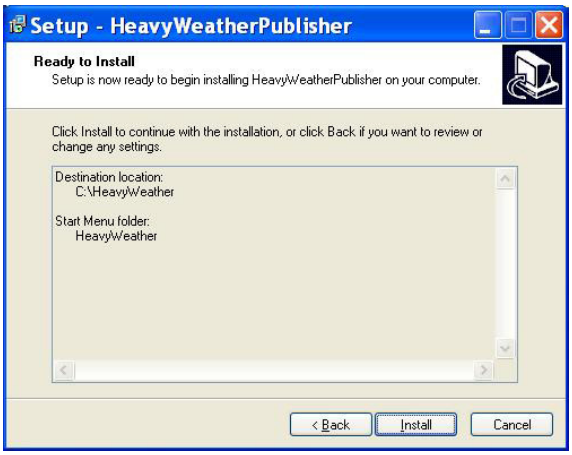
- Select **Next**

Setup - HeavyWeatherPublisher
Select Destination Location
Where should HeavyWeatherPublisher be installed?
Setup will install HeavyWeatherPublisher into the following folder.
To continue, click Next. If you would like to select a different folder, click Browse.
C:\HeavyWeather
Browse...
At least 6.6 MB of free disk space is required.
< Back
Next >
Cancel

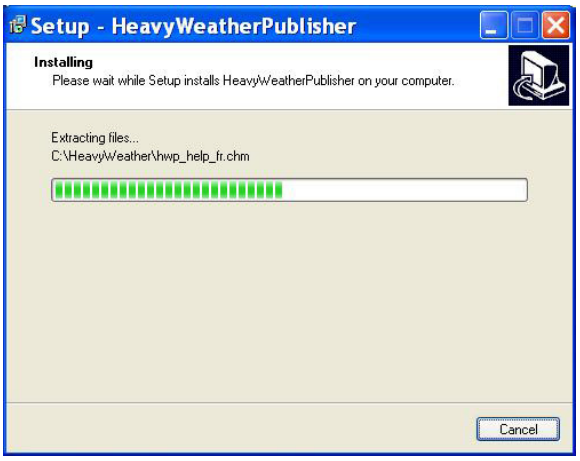
- Accept the defaults on the program shortcuts screen and select **Next.**

Setup - HeavyWeatherPublisher
Select Start Menu Folder
Where should Setup place the program's shortcuts?
Setup will create the program's shortcuts in the following Start Menu folder.
To continue, click Next. If you would like to select a different folder, click Browse.
HeavyWeather
Browse...
< Back
Next >
Cancel

- Proof-read your selections (as below) and select **Install**.


Setup - HeavyWeatherPublisher
Ready to Install
Setup is now ready to begin installing HeavyWeatherPublisher on your computer.
Click Install to continue with the installation, or click Back if you want to review or change any settings.
Destination location:
C:\HeavyWeather
Start Menu folder:
HeavyWeather
< Back
Install
Cancel

- The software will display progress screens during installation.

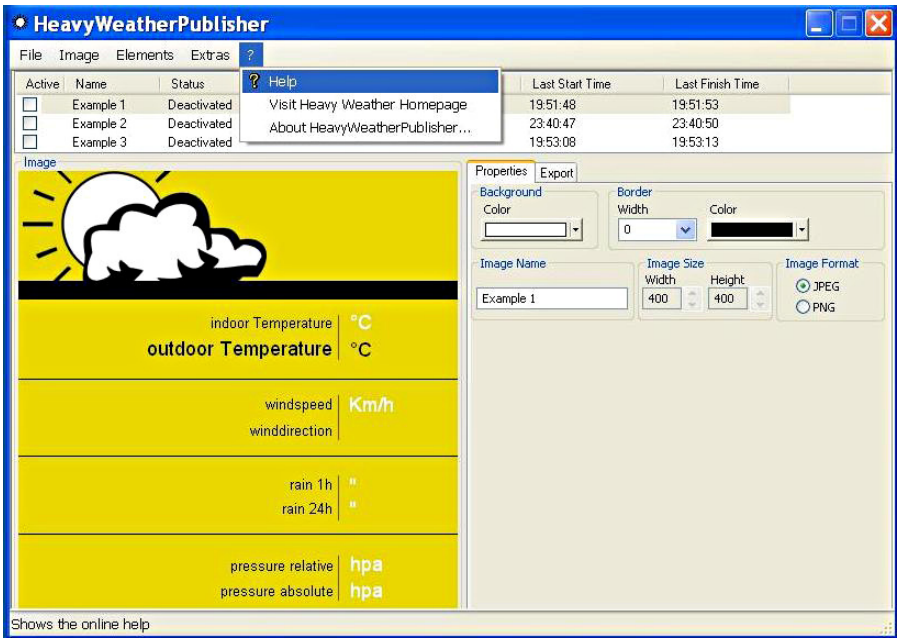


- When the message for completing installation comes up, select **Finish**.

Setup - HeavyWeatherPublisher
Completing the HeavyWeatherPublisher Setup Wizard
Setup has finished installing HeavyWeatherPublisher on your computer. The application may be launched by selecting the installed icons.
Click Finish to exit Setup.
Finish

- A desktop icon should now be available for use of the product. Select the HeavyWeather Publisher icon with a double-click.

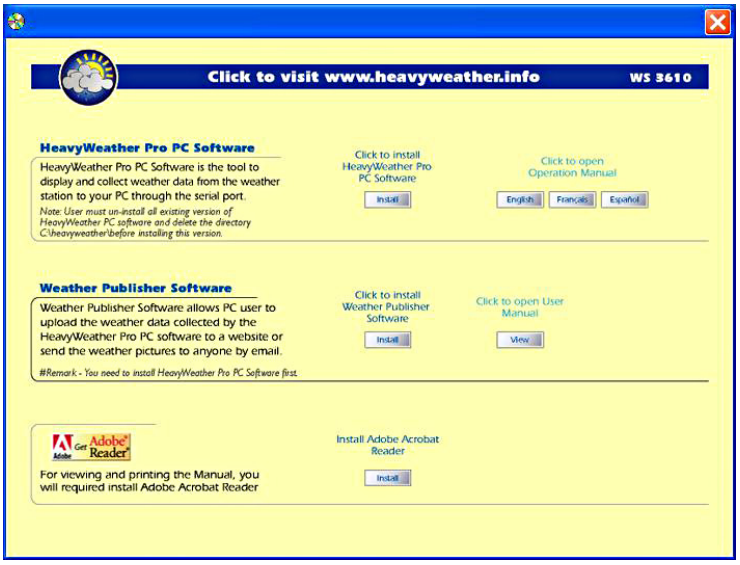
The instructions for use of the HeavyWeather Publisher software are found in the online help. When the main screen opens, find the ? on the menu. Select the Help entry from the pull down menu.



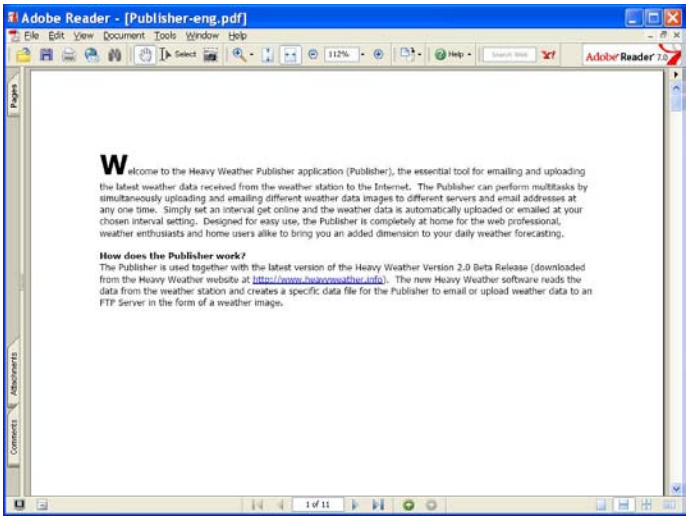
- Use the HeavyWeatherPublisher Help file that comes up to configure and operate the software.

HeavyWeatherPublisher Help
Hide
Back
Home
Options
Contents
Index
Search
Welcome to the Heavy W
Pull Down Menu
Using Tabs
How to create weather ima
How to upload/email weat
How to delete weather ima
Useful Information & Tips
Legal Notices
Welcome to the Heavy Weather Publisher application (Publisher), the essential tool for emailing and uploading the latest weather data received from the weather station to the Internet. The Publisher can perform multitasks by simultaneously uploading and emailing different weather data images to different servers and email addresses at any one time. Simply set an interval get online and the weather data is automatically uploaded or emailed at your chosen interval setting. Designed for easy use, the Publisher is completely at home for the web professional, weather enthusiasts and home users alike to bring you an added dimension to your daily weather forecasting.
How does the Publisher work?
The Publisher is used together with the latest version of the Heavy Weather Version 2.0 Beta Release (downloaded from the Heavy Weather website at http://www.heavyweather.info). The new Heavy Weather software reads the data from the weather station and creates a specific data file for the Publisher to email or upload weather data to an FTP Server in the form of a weather image.
Contents
Pull Down Menu
Using Tabs
How to create Weather Images

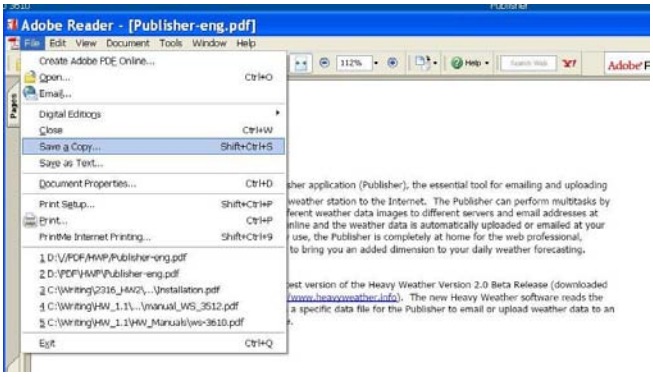
Alternatively, you can save a copy of the Publisher software manual on your hard drive. To do so, find the View button on the main installation screen (which should still be up on your screen behind Publisher). It can be printed, if desired.


Click to visit www.heavyweather.info
WS 3610
HeavyWeather Pro PC Software
HeavyWeather Pro PC Software is the tool to display and collect weather data from the weather station to your PC through the serial port.
Note: User must un-install all existing version of HeavyWeather PC software and delete the directory C:\heavyweather\before installing this version.
Click to install HeavyWeather Pro PC Software
Install
Click to open Operation Manual
English
Français
Español
Weather Publisher Software
Weather Publisher Software allows PC user to upload the weather data collected by the HeavyWeather Pro PC software to a website or send the weather pictures to anyone by email.
#Remark - You need to install HeavyWeather Pro PC Software first.
Click to install Weather Publisher Software
Install
Click to open User Manual
View
Get Adobe Reader
For viewing and printing the Manual, you will required install Adobe Acrobat Reader
Install Adobe Acrobat Reader
Install

Note: The references to requiring HeavyWeather 2.0 are not applicable to series 35/3600 weather stations. HeavyWeather Publisher works with HeavyWeather 1.1 data, but is installed to C:\Heavyweather because the Publisher module is the same for both series of HeavyWeather software.


Adobe Reader - [Publisher-eng.pdf]
File Edit View Document Tools Window Help
Welcome to the Heavy Weather Publisher application (Publisher), the essential tool for emailing and uploading the latest weather data received from the weather station to the Internet. The Publisher can perform multitasks by simultaneously uploading and emailing different weather data images to different servers and email addresses at any one time. Simply set an interval get online and the weather data is automatically uploaded or emailed at your chosen interval setting. Designed for easy use, the Publisher is completely at home for the web professional, weather enthusiasts and home users alike to bring you an added dimension to your daily weather forecasting.
How does the Publisher work?
The Publisher is used together with the latest version of the Heavy Weather Version 2.0 Beta Release (downloaded from the Heavy Weather website at http://www.heavyweather.info). The new Heavy Weather software reads the data from the weather station and creates a specific data file for the Publisher to email or upload weather data to an FTP Server in the form of a weather image.

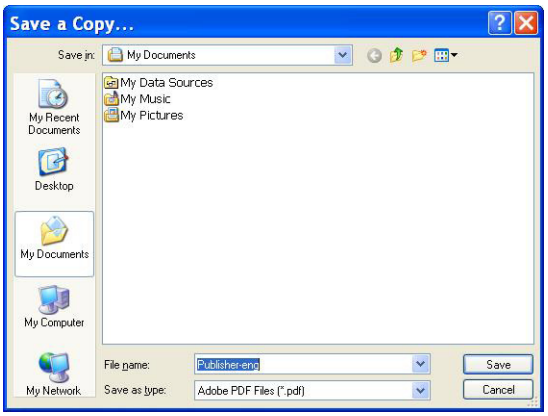
Now select **File|Save A Copy** to place a copy of the manual on your hard drive for reference in or outside of the Publisher application. You can print a copy of the manual.



If you do not have Adobe Reader version 7 or later installed, you may get a warning message. Since you cannot edit the manual, you may select **OK** to acknowledge the message.

Adobe Reader
This document does not allow you to save any changes you have made to it unless you are using Adobe Acrobat 7.0 Standard or Adobe Acrobat 7.0 Professional. You will only be saving a copy of the original document. Do you want to continue?
Do not show this message again
OK
Cancel

You may select any location to save a copy of the manual as a .pdf file. Continue the prompts on screen to find a location you will remember, then click on **Save** to write the file to disk.

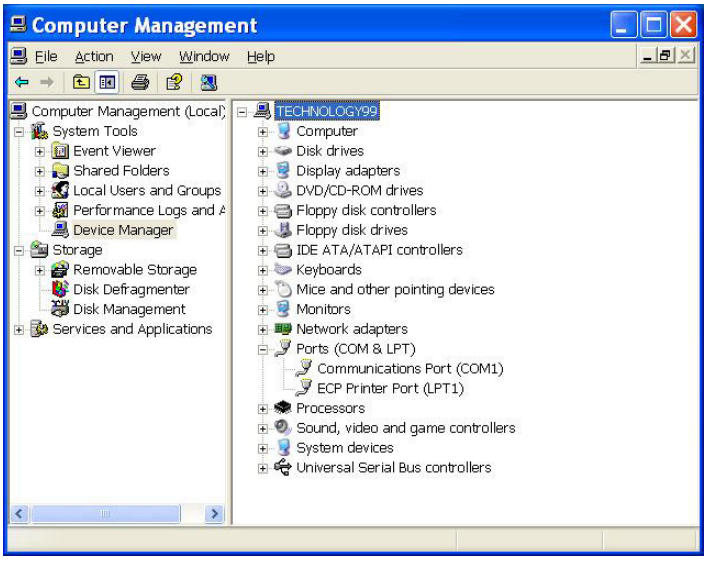


The “Save a Copy” window will close after writing the file. After you have saved the manual:

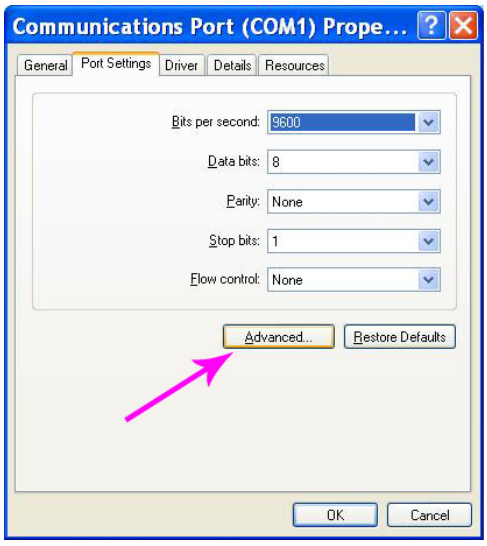
- Click on the Red **X** (upper right corner) to close the Adobe Reader software.
- Click on the Red **X** of the installation screen to close it, as well.
- Remove the CD from the drive and store it in the protective CD case.

Appendix A: Reassign a COM Port

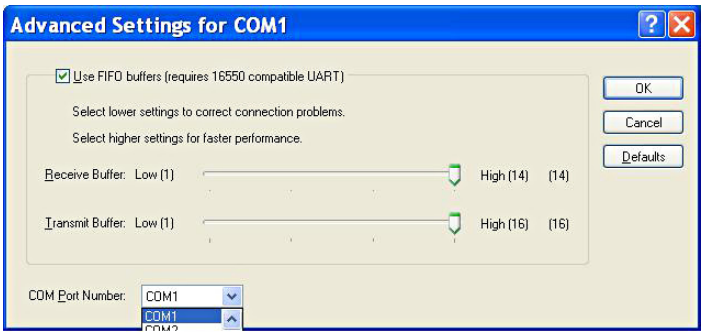
- Right click on the **My Computer** icon and select **Manage**.
- Find **Device Manager** in the left side of the screen.
- Select the + sign in Ports (COM & LPT) to expand entries.



- Find the port you wish to re-assign. Right click on it and select **Properties** (or double-click).
- Select the **Port Settings** tab.
- Then select the **Advanced** Button.



- Open the COM Port Number drop down (lower left corner).


Advanced Settings for COM1
Use FIFO buffers (requires 16550 compatible UART)
Select lower settings to correct connection problems.
Select higher settings for faster performance.
Receive Buffer: Low (1) High (14) (14)
Transmit Buffer: Low (1) High (16) (16)
OK
Cancel
Defaults
COM Port Number: COM1
COM1

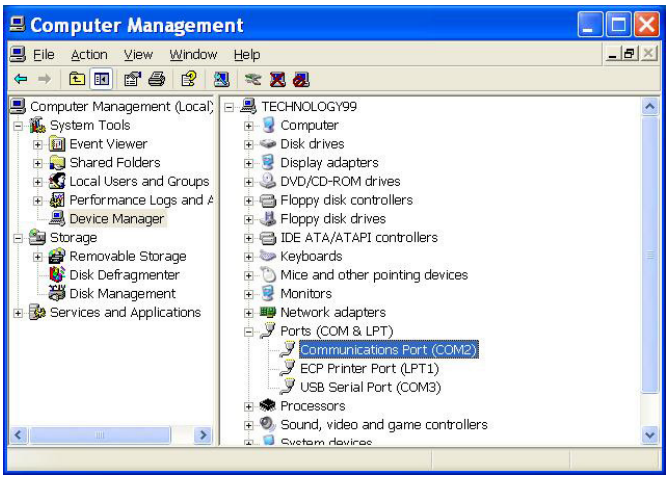
- You may select any COM port between 1 and 8 that does not show "(in use)" beside it. Note: If there are none available, you will need to consult your computer technician to free up a port.

- Select **OK** to close the window.

- Then select **OK** to close the Properties window.

- You will need to **reboot** the computer to register your changes.

- Device Manager should now show the new port number.



- Remember to update your chart of registered COM ports on page 9.

- You need to check if the change in COM port resulted in a change in IRQ (see Appendix B). Note: This is usually only an issue on Windows 98SE/ME systems.

Appendix B: Reassign an IRQ

IRQ Background

Each COM port in a PC is assigned an IRQ by the system. An IRQ is a reserved signal that allows a new communication resource to "interrupt" the hardware system and get use of the PC's system resources.

Most modern PCs use Advanced Configuration and Power Interface features (ACPI), which simply means 2000/XP/Vista generally take care of assigning IRQs so you rarely need worry about IRQ assignments (skip to end of chapter if you have a rare conflict). Users of Windows 98SE or Windows ME need to read on.

A weather station is not a Plug and Play device. **Your weather station cannot share! It must have its own COM port and it's own IRQ assigned.**

Verify current IRQ Assignments

Transfer the COM port information you previously collected into the chart below.

COM Port	IRQ Assigned	Item Using Com Port

To check your IRQ configuration for a COM port:

- Open **Device Manager**. To do so on **98SE/ME** systems, click **Start**, find **Settings**, click **Control Panel**, then **System**. Select the **Device Manager** tab.

- Now double click to expand the **System Devices** branch. Find the COM port for which you wish to verify the IRQ. Right click on it and select **Properties** (or simply double-click on the entry).

- Select the **Resources** tab.

- The IRQ assigned the COM port will appear under **Resource Settings**. It is the entry labeled **IRQ.**

Manually change the IRQ in 98SE/ME systems:

Be aware that if you change *any* device IRQ, you must reconfigure the companion software so it calls the device correctly. Therefore generally, you choose the weather station as the assignment to change.

Most commonly, in manual changes you would assign the weather station any unused IRQ in range 2-5:

- COM 1 is assigned IRQ 2 or 4
- COM 2 is assigned IRQ 3 (except IRQ 1 may be used by a modem)
- if no matching IRQ # is available for the COM port, you would take IRQ 5.
- If those are not available, you may use a higher IRQ if it is unused.

You must reboot for the change to take effect.

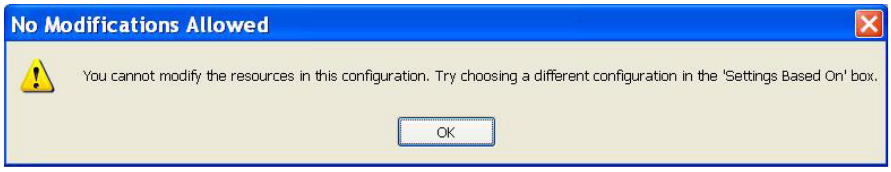
If you have difficulty, refer to http://support.microsoft.com/kb/182604 for further details on how IRQs function in Windows 98SE/ME systems (known as IRQ Steering).

To manually change an IRQ (in rare cases on 2000/XP/Vista):

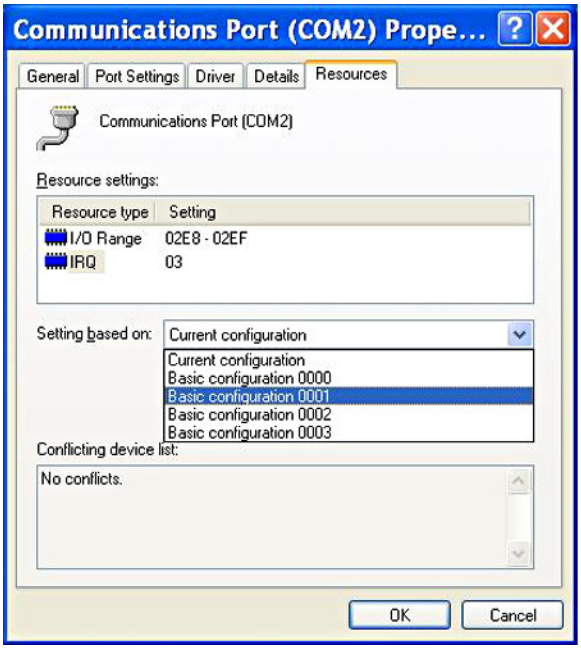
In the event you fail to upload data from the weather station (and it used to work), it is possible that you have a shared IRQ assigned that cannot share well. One tip that you are failing to upload (and you've checked the PC cable is connected properly) is that your HeavyWeather screen greys out (example page 14).

- Follow Appendix A through page 27, then select the Resources tab (see illustration bottom of page 31).
- Verify the IRQ assigned in the "Resources Settings" section.
- Then uncheck the "use automatic settings" box.
- Then double click on the IRQ entry.
- Then select the **Change Setting** button.
- If your computer will allow you, you can then edit the IRQ number assigned entry in the Resource Settings section.

- Most XP users, however, will generate a system error that states, “No Modifications Allowed”. This control comes from ACPI.


No Modifications Allowed
You cannot modify the resources in this configuration. Try choosing a different configuration in the 'Settings Based On' box.
OK

- To complete an ACPI change, you would select the **Settings Based On** entry and open the drop down. You may have other configuration options listed that ACPI will let you use. Watch the “Conflicting device list” box carefully (below) as you try out configurations. Only use a configuration for which the message “No conflicts” appears.



- You do not need to reboot to use IRQ configuration changes on ACPI systems. For other manual configurations, you should reboot before use.

Note: If at this point you are still unable to assign a separate functional IRQ to the weather station, you will need to consult a computer technician. ACPI is powerful and a very useful feature. Modification to it’s properties is beyond the scope of this document**.**

Appendix C: Windows Version Differences

The Windows hardware wizard system has been in use since Windows 98. Therefore, the basic wizard and Device Manager screens are reasonably similar across all versions of Windows.

Windows 2000/Vista Systems

The driver installation screens in Windows 2000 vary little from the Windows XP. Use the XP instructions.

The screens in Vista have a few differences:

- Vista has a new security feature known as **User Account Control**. As you follow the XP instructions, you may be interrupted with requests for permission to continue. If you are installing with reputable drivers, you simply give Windows the permission required.
- The mechanics for changing a COM port remain similar to Appendix A. Vista can assign up to 256 COM ports. The rules don't change, however. A 35/3600 series weather station can only be assigned COM ports 1-8.

Windows 98SE/ME Series

Windows 98SE/ME have the earliest Plug and Play software support. Microsoft has discontinued operating system support for these versions.

A weather station and the 9-pin COM port connection do not need Plug and Play support. They can be manually set.

If you have not already done so, make sure you are current on your Windows operating system backups (usually Drive C). You should also have created an emergency startup disk (boot disk). The mechanics of these precautions are outside the scope of this manual. Consult your administrator or technician if you need assistance.

After you have completed emergency precautions, generically:

- Windows generally handles the IRQ assignment for you, but may assign your COM port higher than 1-8. *Changing the COM port assigned is the most common post-installation change needed for weather stations so always verify COM port first and if necessary, IRQ second.*

- While not common, if you experience or suspect IRQ conflicts, Windows 98/ME are covered in Appendix B.

Appendix D: Frequently Asked Questions

This section contains updated Frequently Asked Questions on the WS-35/3600 series systems written since the original HeavyWeather Pro Help file manual was published.

1. Why has my weather system stopped transmitting the outdoor data?

The lack of PC upload data is not always a computer issue. A basic reset on the weather station may be necessary to re-synchronize it before further evaluation of your PC issues. In short, the weather station must contain data to upload.

Most commonly a battery issue has occurred. Batteries can weaken under outdoor or adverse conditions. Contact can also become disrupted (e.g. component dropped).

All electronic circuit boards in weather displays (base unit) contain a capacitor,[8] which retains a minimal bit of power even when batteries are removed. That results in an incomplete reset when you change batteries. The 35/3600 series has a synchronization routine to reconnect the display with the sensors when you restart the weather station.

With fresh batteries, please attempt the following restart procedure:

- Remove batteries from the thermo-hygro (outdoor) sensor, then disconnect and reconnect the sensor cables.

- Wait at least 1 minute, and reinsert the batteries in the sensor. Be sure to use a new, quality alkaline battery (heavy duty and rechargeable types should be avoided).

- Return to the display and tap the bottom area of the LCD. Select setup and choose next until Factory Reset is shown. Select confirm and follow the prompts on the screen. Note you will be asked to Remove Battery even if running on A/C power only. Please remove the power source (batteries or a/c) and reinstall.

Do not press any other buttons for AT LEAST 30 minutes while the station completes its startup sequence.

[8] Capacitors are common; your PC, cordless phone, etc. have them.

2. What 3rd party Windows software products are compatible with LTC Weather Stations?

La Crosse Technology does not guarantee 3rd party compatibility of other vendor's software products. The 3rd party vendor is responsible for that testing. Any licensing fees required to use a 3rd party software application with a La Crosse Technology weather station are your responsibility.

For your convenience, we do a basic content review before posting the vendor's links. At this time, the 3rd party vendors we are aware of that will support La Crosse Technology weather station communication with a PC are:

- *Weather Display* is published by Weather Display at http://www.weather-display.com
- *Virtual Weather Station* is published by Ambient Weather at http://www.ambientweather.com. Please be aware you need to install Heavy Weather software to use Virtual Weather.

Note: To our knowledge, 3rd party support is limited to the WS-3610 model.

If you decide to use 3rd party software, all software support issues should be directed to the 3rd party publisher of the product at the web sites listed above.

3. Does La Crosse Technology have software for my Mac or Linux PC?

La Crosse technology weather stations do not support MAC or Linux at this time. New development in the 3600 series is not planned, as our replacement product is the 2800 series.

We are aware of releases reporting compatibility with the 2300 series weather stations on a Mac. We have not reviewed them:

- *Weather Tracker* posted a beta release at http://www.afterten.com/
- *Weather Display* is published by Weather Display at http://www.weather-display.com and lists support for Mac OSX.

For Linux users, the 3rd party vendors we were aware of appear to have withdrawn offerings. Market share for Linux desktops have declined in commercial product use.

La Crosse Technology does not guarantee 3rd party compatibility of other vendor's software products. The vendor is responsible for that testing and support. Any licensing fees required to use a 3rd party software application with a La Crosse Technology weather station are your responsibility.

4. As directed, I'm checking the COM port in Windows, but it is asking for the Port Communications settings? What is this?

Different communications devices use different speeds to communicate via the serial port. You must set that speed correctly.

La Crosse Technology Weather Stations use the Windows default port settings:

Bits per Second	9600
Data Bits	8
Parity	none
Stop Bits	1
Flow Control	none

Additional details on COM port connection issues are available in the new Heavy Weather Pro 1.1 Installation Guide (this book) available at http://www.lacrossetechnology.com.

5. I've installed my serial adapter without incident. However, I cannot upload data? How do I verify which COM port is available for use with Heavy Weather?

Note: a physical port located on the back of the PC is a 9 pin Connection. The operating system generally assigns it to COM1.

To determine which COM Port your workstation is on:

- Find **My Computer** (icon on the desktop or in start menu).
- Right-Click **My Computer** and select **Manage**.
- Click on **Device Manager**.
- Move to the right screen and scroll down until you **see Ports| COM and LPT** Double click.
- You should see COM Ports listed with numbers after them [e.g. Communications Port (COM 1).
- Double click the COM Port (e.g. COM 7). This will bring up a Communications Port Properties Box. Click the **Port Settings Tab**, Click **Advanced**. In the lower Left corner, you should see the **Com port** listed.
- Click the Drop Down and select Com 1, 2, 3, 4, 5, 6, 7 or 8. If they are all "(in use)", see your computer technician before changing.

Computers with Windows XP use Advanced Configuration and Power Interface (ACPI). That means XP can change COM or IRQ assignments after installation.

Consult Appendix A and B in the Heavy Weather Pro 1.1 Installation Guide for more information on configuring COM ports and IRQs.

6. I want to write my own software to connect to the weather station. Please provide the RS-232 cabling detail.

The RS-232 communication protocol for this weather station is proprietary information and it will not be released to the public. Sorry for the inconvenience.

7. My computer does not have a Serial Port or that port is already used in my computer? What are my options?

Serial Port Cards

> You have the option of adding a serial port card to your computer. Desktop users can buy a card to install inside the computer (use your component manufacturer's directions to install).
>
> Notebook users can only add serial port support if they have a PCMCIA slot available. There are serial cards that can be installed in the PCMCIA slot.

8. I installed my weather station, and now my computer crashes frequently? What do I do?

If your computer is crashing and/or getting the "Blue Screen" when connecting the weather station software, it is likely one of the following:

- You attempted a Serial-to-USB adapter. The weather station product is not USB compatible, such as WS-3610, WS-3510, or WS-3512.
- Virus or Spyware software are causing a problem.
- Your modem may be causing a conflict that is undetected (usually in COM port or IRQ).

Note: See response to the previous question for additional tips and known issues.

To continue use of the PC, you can disable a driver or port until the conflict is resolved.

9. I'm running Windows XP. If I open Heavy Weather from a command prompt I get an error. What is wrong??

The 16-bit subsystem error you're seeing is caused by one or more missing or corrupted Windows system files. For more information on this error and instructions to fix it, please visit:
http://support.microsoft.com/default.aspx?scid=kb;en-us;324767&Product=winxp

10. When I select the Heavy Weather program icon, I receive error message. What do I do?

You may have a corrupted installation. Please follow this procedure to re-install the software properly.

If you have installed HW Publisher you will need to uninstall that as well. Open Publisher, select extras, options and uncheck the 2 boxes at the bottom. If you do not have Publisher installed disregard this reference.

Heavy Weather Uninstall

- Go to your **Control Panel**, select **Add/Remove Programs**, Remove anything related to Heavy Weather (e.g. HeavyWeather Pro 3610).
- Close Control Panel and look on your desktop. If any Heavy Weather icons remain right click and delete them.
- Go to **Start, My Computer** and click on Local disk C or whatever your "C" drive is called.
- Find the folder call **Program Files**, double click to open it.
- Find the **Heavy Weather** folder and right click to delete it.
- Go Back to your "C" Drive and find the **Program Files** folder. Then find the **Heavy Weather** folder within. Right click to delete it.
- Find your **Windows** Folder, double click to open.
- Find your **Temp** folder double click to open.
- Go to **Edit,** Select **All**. Then go to **File** and **Delete**. Yes to delete **all**.[9]
- Close out of everything and restart your computer.

[9] The \temp directory is a work area for copies of work in progress. Deleting the \temp directory is a normal Windows cleanup task and does not affect your saved work.

- Reinstall Heavy Weather only. Connect your weather station and see if it works. When it is working you can install Publisher.

11. When I open Heavy Weather, the window is too big for the monitor screen. How do I adjust this?

When your weather software screen is too big for your monitor, you need to have your display set to 96 dpi.

This is found on the advanced tab under display settings. Using a larger size (such as 120) will cause the display problem you're seeing.

12. How can I reset MIN/MAX temperature on the computer?

To reset individual MIN/MAX values, follow these steps:

- Double click on the min/max value on the Heavy Weather program while your base station is connected to your computer.

- Click on the **Reset** button. The min/max value will reset to current values, 0.00 or dashes, dependent on the value. Please Note this will also reset the base station.

13. How do I transfer Heavy Weather 1.1 data to Excel for graphs and charts?

Please refer to your Heavy Weather Pro Help file manual for more details. In general:

- In Heavy Weather 1.1 main window, in the left hand column, double-click on the history file name that you wish to export. (If you do not have a list in the left, click View, History Files).
- Go to FILE and select EXPORT AS TEXT. Create a file name in the pop up box. Please note the location of this file e.g.: C:\Program Files\HeavyWeather\january.
- Open Excel. Select File, Open. When the open box appears, on the bottom under FILES OF TYPE select TEXT FILES.
- On the top where it says LOOK IN, select the file location e.g. C:\Program Files\HeavyWeather.
- With the Heavy Weather folder open, you should see the text file you just created (january).

- Select that file and a 3 step Wizard will appear. On the first screen choose DELIMITED. Then select **Next**.
- On the second screen under Delimiters select SEMICOLON. Note how you have nice neat columns in the Data Preview?
- Click **Next,** and the last box will appear. No need to change anything unless you would like the date formatted differently. Click finish. Your data should appear in Excel. You may need to adjust the cell width.

14. There are "spikes" of rain on my history file. What causes this?

This can be caused be radio frequency interference or loss of signal while connected to the computer.

When your weather station is connected to the computer while loss of signal from the sensors, or a restart occurs, there can be a spike in rainfall on the computer history file. (Often 70-80 inches). Please close the Heavy Weather first when resetting the weather station and transmitter. This can also occur during loss of power or connection during a storm.

Once the rain value is recorded to the history file you will need to start a new history file edit the history file (WS 3610).

15. Please explain how the Weather Station stores data versus the PC history?

The Heavy Weather program automatically records all the weather data from the current period onwards to form a history of the weather events. The recording interval can be set from 1 minute to up to 68 hours in the history section (default setting 1 hour) together with the option of recording a next set of data. The next set of data option can be used for example if the user set the initial recording interval to every 1 hour and required the next set of data for in 5 minutes time, the program would then initiate recording of the weather data in 5 minutes before reverting to the previous setting of 1 hour. However based on the previously given example, due to the mass communication of weather data and high frequency transmission from the sensors to the base station to the PC and back again, it is possible that the next set of data recording i.e. 5 minute interval will be missed and will not in fact be executed in exactly 5 minutes time as will be seen from the history file.

From the main Heavy Weather window, the history section will show the file name used to save the weather data together with the date and time and the total number of sets of data recorded. Each set of data consists of pressure, indoor temperature, indoor humidity, outdoor temperature, outdoor humidity, dew point, wind chill, wind speed, wind direction, total rain, time and date. The user can also select to record a new history file at anytime by changing the history file or revert to any saved history file that had been previously saved. The initial history file name is history.dat. If a previously saved history file is used again, the current recording interval will be regarded as the latest setting and all new data will be recorded into that file (see 8.0 Settings below for working detail). The history file can be displayed in a window parallel in running to the Heavy Weather program. If desired the saved files can be saved as text files and opened in other formats.

- It is recommended that you rename the history file to a easily understandable name (not history, history 1, history 2, etc) and change the file at least quarterly. Previous history is saved and can be retrieved at any time.

- If the base station has not been connected to the computer and is storing data, when you connect to the computer, it should download the saved dated at the interval selected by the computer. If 5 minute intervals are selected, it will retrieve 1 random reading from the base station in 5 minute intervals.

16. I can't upload data to my PC and don't know what to do next. What information do I send in for technical support?

Please include the following responses in an email to support@lacrossetechnology.com.

- How are you connecting to the computer? Are you connecting with the 9 Pin Serial cable provided or with something in addition to or in place of the 9 Pin Serial cable? If you are using something in addition to the 9 pin serial cable provided, what brand is it? Is it Windows Certified? Does it come with it's own driver disk?
- What operating system, including Service Pack, do you have on your computer?
- Did the Software load without errors? If there were errors what are they?
- What is the software name on the top left Header Bar of the Software when opened on the computer?
- Do you have the software for other Active sync/Hot sync devices (e.g. PDA) loaded on this computer?

- What Model is your Weather Station? The model number will start with a WS followed by 4 numbers and possibly letters.
- How long have you had the Weather Station?
- Has the Weather Station ever connected to the computer?
- Describe exactly what you see on the computer screen. Can you attach a screen shot?
- If it worked previously, did you add software or hardware, move the computer, of have a lightening storm or power outage about the time it stopped connecting?
- Are you a Ham radio operator? Are there large transformers near you?

17. Everything seems to work in HeavyWeather Review except the Time and date are always several hours ahead and the wind chill data looks incorrect. What does this mean?

The current version of Weather Review uses GMT for all time stamps. The incorrect wind chills are caused by a bug; both of these issues have been reported to our developers. Updates will be posted at www.heavyweather.info when available.

18. How do I Email weather images from Heavy Weather Publisher?

To email a weather image, simply click on the "Export" tab of the main Publisher window and enter the data in the spaces provided for the email fields as follows:

"Internet Connection":
Choose "Direct Connection" if you have a high-speed internet connection such as DSL, cable or satellite. Choose "Dial Up Connection" if you use a standard phone line and your computer's modem. You will need to type in the dial-up number you use in the field to the right.

"Type and Interval":
1. Choose "Email" if you choose to upload you weather image to send a message and image by email.
2. In the "First Start Date" field, choose the date which you choose to begin the report of your weather image.
3. In the "First Start Time" field, choose the time which you choose to begin the report of your weather image.
4. In "Export Interval" choose the number of minutes between updates of your current weather image. The interval can be between 60 and 1440 minutes.

"Sender":
In the "SMTP" server field, input your email service provider name by prefacing by the letters smtp." (Example: smtp.yahoo.com). Use all lower case letters/characters for this line.

"Username":
Type the username you use through your service provider (ISP) to access the account. Please assure the name used is correct with appropriate upper and lower case characters.

"Password":
Type the password you use through your service provider (ISP) to access the account. Please assure the name used is correct with appropriate upper and lower case characters.

"Name":
In this field, simply type your name as you wish for it to appear in the header of the email.

"Email"
In this field, simply type your email address.

"Recipient List"
In this field, type each of the email addresses that you wish to send the email image to. Make sure to separate each individual email address with a comma. (Example: joe@mynet.com, jane@wow.com, bill@netmania.org)

"Email Subject"
In this field, type the title your wish to put in the subject line of the email (Example: "Greetings From Boston")

"Text"
Fill in whatever you wish to say along with your weather image.

After all of this information is filled in, press "Apply" to save the data, otherwise it will be lost.

19. I'm satisfied with my Heavy Weather upload, now how do I publish this information on the Internet?

To upload weather images to your website, use Heavy Weather Publisher:

To upload a weather image, simply click on the "Export" tab of the main Publisher window and enter the data in the spaces provided for the FTP fields as follows:

"Internet Connection":
Choose "Direct Connection" if you have a high-speed internet connection such as DSL, cable or satellite. Choose "Dial Up Connection" if you use a standard phone line and your computer's modem. You will need to type in the dial-up number you use in the field to the right.

"Type and Interval":
1. Choose "FTP" if you choose to upload you weather image to your website.
2. In the "First Start Date" field, choose the date which you choose to begin the report of your weather image.
3. In the "First Start Time" field, choose the time which you choose to begin the report of your weather image.
4. In "Export Interval" choose the number of minutes between updates of your current weather image. If using "FTP", the interval can be between 1 and 1440 minutes.

"FTP Server":
In this field, type your FTP address for your site (Example: ftp.mysite.com). Information on your FTP address can be found through your service provider. Note: For this program to function properly, the host server of your website must allow FTP protocols. Please contact your website host/service provider (company which you subscribe your web page account through) for information regarding FTP protocols and/or your ability to use them with your website.

"Username":
Type the username you use through your website host. Please assure the name used is correct with appropriate upper and lower case characters.

"Password":
Type the password you use to access your website host. Please assure the name used is correct with appropriate upper and lower case characters.

"Target":

In the "File Path" field, type in the file folder on your website which the image will go to. (Example: /pictures) Note: The first file extension may need to be input as your user name with your service provider/host for the website, to be followed by the file names of the folder you wish to store the image on your site (Example: /yourusername/pictures).

"File Name":
Type the file name which you will identify the file by. (Example: "weather.jpg")

After all of this information is filled in, press "Apply" to save the data, otherwise it will be lost.